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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,936	12/09/2003	Toshiyuki Ito	01-516	2400

23400 7590 04/21/2005

POSZ LAW GROUP, PLC  
12040 SOUTH LAKES DRIVE  
SUITE 101  
RESTON, VA 20191

EXAMINER

ZANELLI, MICHAEL J

ART UNIT	PAPER NUMBER
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3661

DATE MAILED: 04/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/729,936

Applicant(s)

ITO ET AL.

Examiner

Michael J. Zanelli

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 12/9/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. The application filed 12/9/03 has been examined. Claims 1-17 are pending.
2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.
3. The IDS filed 12/9/03 has been considered.
4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-8 and 11-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Cherveney et al. (6,047,234).

A. As per claims 1, 6, 11 and 15, Cherveney discloses a system for evaluating and updating map data as shown in Figs. 1 and 2A. Fig. 2A shows a vehicle system which includes a map database (56), sensors (60) for obtaining the position of the vehicle (col. 5, lines 4-8), means (52,53) for collating the vehicle position information and road location information from the map database to determine if a difference exists (variances) (col. 5, lines 13-38). Accuracy of the these variances is correlated with upper/lower threshold values established according to the tolerances of the position determining sensors (i.e., degree of accuracy) (col. 5, lines 29-33). The variances in conjunction with the accuracy determinations (i.e., filtered sensor data) may be transmitted to a remote location for further processing/output (see Fig. 1; Fig. 2A:58; col. 5, lines 39-42). The transmitted information is received at the remote location

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whereby it is evaluated to determine whether or not the map database needs to be updated. As shown in Fig. 1, the received data is evaluated to determine the credibility or "confidence level" of the map database to determine whether or not the map database should be updated in view of the information transmitted from the vehicle(s) (col. 6, lines 50-57; col. 7, lines 50-57). The results of the evaluations may be outputted to vendors/end users (Fig. 1:18,24,26). Furthermore, statistical information may be generated to determine the reliability of the data based on past evaluations (i.e., historical data). The confidence levels may be increased or decreased as a result of the statistical evaluations (col. 7, lines 24-57).

B. As per claims 2-5, 7-9 and 12-14, as noted above whereby Cherveny further discloses analyzing the collated information to determine roads which do not exist in the map database and to update the map database based on the confidence level of the information (col. 10, line 15 to col. 13, line 9).

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point

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out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 9, 10, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chervený in view of Kato (6,453,233) and Tada et al. (6,662,105).

A. As per claims 9, 10, 16 and 17, Chervený is applied as above whereby tolerances in the position determining sensors are taken into consideration in determining the accuracy of the differences (variances) between the vehicle position information and the map information (see paragraph 5A above). The claimed invention differs in that the version of the map database used is taken into consideration as an indication of the accuracy of the difference (variance) information. However, at the time of applicant's invention it was known in the navigation arts that errors could be introduced during map matching due to an outdated version of a map database (see as exemplary Kato: col. 1, lines 28-41; Tada: col. 1, lines 57-63; col. 2, lines 55-62). One of ordinary skill in the art would have recognized that the differences noted by the system of Chervený could be introduced as the result of an outdated map database. In addition, one of ordinary skill in the art would have recognized that identification of the version of the map database used in the vehicle would have had to have been communicated to the remote evaluation means otherwise it would have been unclear as to whether or not the differences have already been updated in the remote database.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited documents are of general interest.

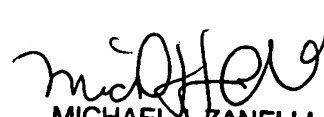
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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Zanelli whose telephone number is (571) 272-6969. The examiner can normally be reached on Monday-Thursday 8:30 AM - 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas G. Black can be reached on (571) 272-6956. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/mjz

  
MICHAEL J. ZANELLI  
PRIMARY EXAMINER